



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,391	01/14/2004	Soo-Young Oh	0465-1520PUS1	1888
2292 7590 04/01/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER PERRIN, JOSEPH L				
ART UNIT		PAPER NUMBER		
1792				
NOTIFICATION DATE		DELIVERY MODE		
04/01/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/756,391

Applicant(s)

OH ET AL.

Examiner

Joseph L. Perrin, Ph.D.

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date 20071129; 20070925
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 26 December 2007 has been entered.

Response to Arguments

2. Applicant's arguments filed 26 December 2007 have been fully considered but they are not persuasive.

3. On page 7 of the response (second paragraph), applicant takes issue with the Examiner's "broadest reasonable interpretation" of the term "injecting". Specifically, applicant alludes to portions of the specification which "provide some context" to the term "injecting" but provides no showing of any limiting definition. Applicant is reminded that while it is appropriate to use the specification to determine what applicant intends a term to mean, a positive limitation from the specification cannot be read into a claim that does not itself impose that limitation. A broad interpretation of a claim by USPTO personnel will reduce the possibility that the claim, when issued, will be interpreted more broadly than is justified or intended. An applicant can always amend a claim during

Art Unit: 1792

prosecution to better reflect the intended scope of the claim (see MPEP § 2106(II)(C)).

Given the fact that no limiting definition of the term "injecting" is provided in the original disclosure as filed, the term "injecting" is given its broadest reasonable interpretation.

As evidenced by the attached definition provided by the Examiner, the term "inject" considered to be is defined as "[t]o force or drive (a fluid) into something". Accordingly, since DOBER discloses forcing/driving steam into the perforated drum and into laundry while rotating the drum of the washing machine (as indicated in the rejection), recitation of DOBER reads on the claimed terminology of "injecting the generated steam to the laundry in a drum directly while rotating the drum of the washing machine". The Examiner notes that the term "directly", added by the instant amendment, provides no additional limiting structure or definition to the claim but rather raises the issue of indefiniteness as described in the forthcoming rejection. The Examiner further notes that "injecting" steam to laundry in a washing machine for the purpose of either cleaning or removing wrinkles is a known concept, as evidenced by the applied prior art. Thus, the record is not clear how applicant's invention as claimed clearly distinguishes over the prior art of record, much less how the claims patentably distinguish over what is known in the washing machine art as required by 37 CFR 1.111(b). Applicant is requested to clarify the record as to how the claims define a patentable invention by specifically pointing out how the language of the claims patentably distinguishes them from the references as it is not clear how the claims define a patentable invention. Absent such showing as to how the claims patentably distinguish in accordance with the

requirements of 37 CFR 1.111(b), the claims are considered unpatentable over the cited prior art.

4. On page 7 of the response (third paragraph), applicant argues that DOBER does not disclose forcing steam into the drum. The Examiner disagrees. Manifestly, in order for steam to be purposefully applied in DOBER the steam necessarily must be forced. Arguments to the contrary suggest that the application of steam in DOBER does not pass through the drum and laundry, which is obviously not the case.

5. On page 7 of the response (last paragraph), applicant appears to argue that the Examiner does not take the position that DOBER provides the claimed injecting means. On the contrary, this is precisely what is described in DOBER. Even if, *arguendo*, applicant were to claim additional structure to define the injecting means, such as an injecting nozzle, the position is taken that since DOBER discloses applying steam for removing wrinkles, readable on the claimed "injecting" step, the substitution of any known steam applying means (i.e. via steam nozzle) would be an unpatentable modification absent secondary considerations because the use of steam injecting means is known in art (in DOBER and other prior art of record) and would produce the same predictable result of applying steam to remove wrinkles. If applicant relies on the means for applying steam (i.e. the steam injecting step) as the point of novelty in the instant application, applicant is urged to define the claims over the prior art of record and provide evidence or showing of unexpected results or unpredictability of the claimed invention. Absent such showing, the position is maintained that the use of

known means for injecting steam would produce the same predictable result and is *prima facie* obvious.

6. On page 8 of the response (first paragraph), applicant argues that the added language "directly" somehow distinguishes over the cited prior art. However, such language fails to provide any limiting feature of the claimed invention as the application of steam is "direct" in the cited prior art. Moreover, the inclusion of the term raises the issue of indefiniteness because it is unclear what applicant intends. Is this meant to imply structure? Or simply how the steam contacts the laundry? Either way, it is not clear how such language patentably distinguishes over the prior art of record.

7. On page 8 of the response (third paragraph), applicant further argues that "the present invention provides a steam generator that is separated from the tub and water for the steam is not wash water stored in the tub". However, applicant's arguments are not commensurate in scope with the claimed invention as the features upon which applicant relies (i.e., separate steam generator) are not recited in the rejected independent claims argued. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

8. On pages 8-9 of the response (bridging paragraphs), applicant further argues that "Hosokawa is directed to a vertical axis type washing machine, as opposed to Dober, which is a horizontal axis type washing machine" in alleging that one skilled in the art "would not look to teachings from vertical axis washing machines to modify horizontal axis type washing machines since slight modifications could impact the

cleaning efficiency and power consumption of the horizontal axis type washing machines." The Examiner disagrees.

9. Firstly, it appears that applicant is requiring bodily incorporation of the references. However, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instant case, HOSOKAWA is cited for the location of a steam generator with a washing machine which has no relevancy on whether or not the washing machine is vertical or horizontal nor does the structure by which the steam is applied. That is, there is nothing that remotely suggests that the location of the steam generator or the steam injecting means has an effect on the tilt axis of the washing machine. It is well settled that relocating parts is *prima facie* obvious and applicant's arguments provide no evidence or showing to the contrary. Moreover, the substitution of one known steam injecting means for another would be well within the level and skill generally available to one having ordinary skill in the art when the substitution of one known steam injecting means for the other would yield the same predictable result. In the instant case, substituting one known steam injecting means for another would yield the same predictable result of applying steam to a washing machine to effect a more efficient cleaning and/or reduction in wrinkling, both well known concepts for steam application in the laundry art.

10. Secondly, one having ordinary skill in the washing machine art would look to all features of washing machines, including both horizontal, vertical, and tilted axis machines, which are the only three types of conventional washing machines incorporating rotary drums. The fact that both horizontal and vertical washing machines applying steam are cited supports this position. Moreover, the Examiner notes that the prior art is replete with teachings of washing machines and numerous embodiments for either horizontal or vertical axis washing machines (which are the standard rotary drum washing machines in the washing machine art) applying steam via known steam injecting means and both horizontal and vertical washing machines are analogous art and well understood by one having ordinary skill in the washing machine art.

11. On pages 9-10 of the response (bridging paragraphs), applicant cites relevant portions of the MPEP in traversing the rejections. As these are "provisional" rejections, the rejections will be maintained until either the instant application or the cited applications become patented. At such time, the issue of double patenting will be reconsidered. Applicant's argument that the double patenting rejections should be withdrawn because the § 103 rejections are improper, this is not persuasive because the § 103 rejections are proper for reasons of record.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In independent claims 1, 5 & 9, the term "directly" raises the issue of indefiniteness because it is unclear what applicant intends. Is this meant to imply structure? Or simply how the steam contacts the laundry? The metes and bounds of the claimed patent protection are also unclear as it is unclear what a "direct" and "indirect" steam application reads on. This potentially also raises the question of new matter because of the scope of the claim is not adequately defined in such language. However, given the broadest reasonable interpretation, the claims are construed to read on directly applying steam which is precisely what any steam applying means performs in the art. In view of the indefiniteness, the scope of the claimed injecting of steam "directly" is construed to only read over expressed disclosures of "indirect" steam injecting which are not described in the prior art of record. However, clarification and correction are still required.

Claim Rejections - 35 USC § 103

14. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

15. Claims 1-3, 5-7, 9, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over DOBER in view of ALLEN or CHO. Re claims 1-3, 5-7 & 9, DOBER discloses a method for smoothing wrinkles of the laundry in a drum-type washing machine (col. 1, lines 47-48 & 13-14) comprising supplying water into a steam

generator of a drum-type washing machine when a command signal for smoothing wrinkles of the laundry is inputted by a user's request after a washing process of the drum-type washing machine is completed (col. 1, lines 20-24; col. 2, lines 22-24); heating water by means of a heater installed in the steam generator to generate steam (col. 2, lines 31-35); injecting steam generated, for a first pre-set time to the laundry in the drum while rotating the drum of the drum-type washing machine (col. 2, lines 34-39); terminating/stopping steam-injecting when the first pre-set time elapses (col. 2, lines 52-53); rotating the drum for a second pre-set time after stopping injection of steam to the laundry in the drum-type washing machine (col. 2, lines 54-56); and stopping rotation of the drum when the second pre-set time elapses and informing a user of completion of smoothing wrinkles of the laundry (col. 2, lines 56-57). Re claims 14 & 18, DOBER further discloses supplying water via line (5) located above the drum. While DOBER clearly discloses controller (10) for "controlling and supervising" the wash/steam cycles, the washing machine DOBER does not expressly disclose inputting the wrinkle smoothing cycle/process or displaying the wrinkle smoothing cycle/process. However, it is common knowledge that washing machines incorporate a cycle/parameter inputting means along with a displaying means for displaying said cycle/parameter, such as a conventional touch screen controller or a knob/button controller. ALLEN teaches that it is known in the laundry processing art to provide a laundry steaming apparatus with an input controller which detects an input command to perform a steaming process and display the steaming process is being performed (see Figure 2 and relative associated text). CHO teaches that it is known to provide a

washing machine with key input means for inputting "various kinds of wash-related operation command" and display means for "displaying the operation state of the washing machine, functions, etc.".

It would have been obvious to one having ordinary skill in the art to include cycle/process input means and display means, as taught in the laundry apparatus of ALLEN or CHO, in the washing machine of DOBER for the purpose of yielding the predictable results of allowing a user to input a particular cycle/process and view when the cycle/process is being performed. Moreover, there would be a reasonable expectation of success in combining the references to yield the claimed invention since the references are analogous art (textile treatment art).

16. Claims 4, 8 & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over DOBER in view of ALLEN or CHO, and further in view of NUKAGA or OTANI.

Recitation of DOBER is repeated here from above. While DOBER discloses injecting steam and terminating steam via a controller such that the washing machine door can be released, DOBER does not expressly disclose an alarm or LED signal to indicate to a user the completion of the process. Both NUKAGA (see col. 22 lines 64-68) and OTANI (see abstract) teach the well known concept of providing either an audible alarm or LED to signal user upon completion of a process. The position is taken that it would have been within the level and skill of one having ordinary skill in the art at the time the invention was made to provide the washing machine dewrinkling process of DOBER with an alarm or LED signal to indicate completion of a treatment process. Moreover,

there would be a reasonable expectation of success in using such alarm/signal to indicate completion of a process since it is common knowledge that washing appliance conventionally include alarms/signals to indication completion of a treatment process, such being readily within the level and knowledge of one having ordinary skill in the art.

17. Claims 11-13, 15-17 & 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over DOBER in view of ALLEN or CHO, either alone or further in view of HOSOKAWA and/or DE 3408136 to KLEIBER. DOBER, ALLEN & CHO, *supra* disclose the claimed invention including injecting steam and supplying water from above the drum. However, the recited combination does not expressly disclose the location of a steam generator including a heater and such injecting means being located above the drum. It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the steam generator/heater and injecting opening at any desired location, either above, below or beside the drum, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Moreover, it would have been "obvious to try" to locate such steam generating and injecting means due to the finite number of identified, predictable locations in a washing machine with a reasonable expectation of success to one having ordinary skill in the art. Furthermore, regarding the prior art, HOSOKAWA discloses such configuration wherein a washing machine is supplied with a steam generator with heater (9 & 11) above the drum which injects steam via a steam supply line and steam injecting nozzle (12) above the drum. Similarly, KLEIBER discloses a laundry appliance

and injecting steam via a steam injection nozzle connected to a supply line (see entire document, for instance, the abstract, Figures and relative associated text).

All of the component parts are known within the cited references above. The only difference is the combination of "old elements" in a single device to perform the claimed function.

Thus, it would have been obvious to one having ordinary skill in the art to provide a laundry appliance steam generator with heater and injecting means located above and/or outside the drum, as taught by HOSOKAWA and/or KLEIBER, into the washing machine as described in the combination of DOBER, ALLEN & CHO, since the operation of the steam generator and injecting means is in no way dependent on the operation of the washing machine of the cited art, and the steam generator and injecting means could be used in combination with a standard washing machine to achieve the predictable results of selectively supply steam in a steam treatment cycle in a washing machine. Moreover, there would be a reasonable expectation of success in simply combining the steam generating means of the laundry appliances fairly described in HOSOKAWA and/or KLEIBER with the washing machine disclosed in DOBER, ALLEN & CHO for the intended purpose of supplying steam in a laundry process since all of the references are analogous art and well within the general knowledge and level of ordinary skill in the art.

Regarding claims 15, 16 & 19, each of DOBER, HOSOKAWA & KLEIBER disclose applying steam to an appliance. Because DOBER and both HOSOKAWA & KLEIBER teach methods for applying steam in a laundry appliance during a laundry

Art Unit: 1792

treatment process, it would have been obvious to one skilled in the art to substitute one known steam supply means for the other to achieve the predictable results of treating the laundry with steam.

Double Patenting

18. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a

terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

19. Claims 1-3, 5-7 & 9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 8 of copending Application No. 11/181,801 in view of ALLEN or CHO. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed scope fully encompasses the copending claim with the exception of the inputting of the

wrinkle smoothing (steaming) process and the displaying of the steaming process.

ALLEN and CHO, *supra*, teach that it is known to provide a laundry appliance with inputting means and displaying means. Thus, the incorporation of said conventional inputting means and displaying means would have yielded the same predictable results of allowing a user to input and view laundry parameters and such modification would be well within the level and skill generally available to one having ordinary skill in the art.

20. Claims 1-3, 5-7 & 9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 5 of copending Application No. 10/751,978 in view of DOBER and further in view of ALLEN or CHO. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed scope fully encompasses the copending claim but for when the steam is injected (while rotating versus before rotating) and repeating the steps of injecting and stopping or the inputting of the wrinkle smoothing (steaming) process and the displaying of the steaming process. DOBER, *supra*, teaches that it is known to supply steam while rotating. Such modification considered to be an obvious variant (i.e. injecting steam while rotating versus before rotating) as it is well settled that rearranging method steps and repetition of method steps are within the level of ordinary skill in the art. ALLEN and CHO, *supra*, teach that it is known to provide a laundry appliance with inputting means and displaying means. Thus, the incorporation of said conventional inputting means and displaying means would have yielded the same predictable results of allowing a user to input and view laundry parameters and such

modification would be well within the level and skill generally available to one having ordinary skill in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 8:00-4:30.
22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Perrin/

Art Unit: 1792

Joseph L. Perrin, Ph.D.
Primary Examiner
Art Unit 1792

JLP